

REMARKS

Claims 1-6 remain pending in the above-identified application and stand ready for further action on the merits.

Claim Rejection 35 USC § 103(a)

Claims 1-6 were rejected under 35 USC § 103(a) as being unpatentable over **Alper et al.** US '741 (US 5,149,741) in view of **Goulait et al.** US '588 (US 5,482,588), and further in view of **Fries, et al.** US '592 (US 5,549,592). Applicants respectfully traverse the rejection and ask for reconsideration and withdraw of the same based on the following considerations.

Legal Standard for Determining Prima Facie Obviousness

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

"There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998).

The level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999).

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Lee*, 277 F.3d 1338, 1342-44, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In *In re Kotzab*, the claims were drawn to an injection molding method using a single temperature sensor to control a plurality of flow control valves. The primary reference disclosed a multizone device having multiple sensors, each of which controlled an associated flow control valve, and also taught that one *system* may be used to control a number of valves. The court found that there was insufficient evidence to show that one *system* was the same as one *sensor*. While the control of multiple valves by a single sensor rather than by multiple sensors was a "technologically simple concept," there was no finding "as to the specific understanding or principle within the knowledge of the skilled artisan" that would have provided the motivation to use a single sensor as the system to control more than one valve. 217 F.3d at 1371, 55 USPQ2d at 1318.

In *In re Jones*, the claimed invention was the 2-(2'-aminoethoxy) ethanol salt of dicamba, a compound with herbicidal activity. The primary reference disclosed *inter alia* the substituted ammonium salts of dicamba as herbicides, however the reference did not specifically teach the claimed salt. Secondary references teaching the amine portion of the salt were directed to shampoo additives and a byproduct of the production of morpholine. The court found there was no suggestion to combine these references to arrive at the claimed invention.

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art, and all teachings in the prior art must be considered to the extent that they are in analogous arts. Where the teachings of two or more prior art references conflict, the examiner must weigh the power of each reference to suggest solutions to one of ordinary skill in the art, considering the degree to which one reference might accurately discredit another. *In re Young*, 927 F.2d 588, 18 USPQ2d 1089 (Fed. Cir. 1991).

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)

Incorporation of Earlier Remarks

The Examiner is respectfully requested to again consider remarks set forth at pages 2-7 of the earlier filed reply of November 23, 2005 as they remain pertinent to a consideration of the

patentability of instant claims 1-6. In this regard, said remarks were presented in reply to a 35 USC § 103(a) rejection that is identical to that being currently maintained by the Examiner. As such, said remarks set forth at pages 2-7 of the November 23, 2005 reply are incorporated herein by reference in their entirety, and withdrawal of the current rejection is respectfully requested based on a full reconsideration of said remarks.

The Present Invention Being Claimed

The invention defined by pending claims 1-6 in the application requires that the materials of the tape tab comprising polypropylene, side flap and hot-melt adhesive be chosen such that the side flap is torn near a joint when pulled at a peel angle of 180° at a speed of 100 m/min. Thus, the tape tab must be made of a material that is more resistant to tearing than the side flap, while the adhesive must provide a strong enough bond so that the side flap tears before the entire adhesive seal is broken, with the adhesive being a hot-melt adhesive having a melt viscosity of 30 to 100 Pa·s at 140°C.

Distinctions Over the Cited Art of Record

The hot melt adhesives taught by the cited art of record do not have a melt viscosity of 30 to 100 Pa·s at a temperature of 140°C as defined in current claim 1. Therefore, it is submitted that the cited art of record is not capable of achieving the objects of the present invention, i.e., high shear resistance and high peel strength characteristics in adhesion of a fastening tape made of polypropylene and side flaps comprising nonwoven fabric.

As can be seen from Table 1 of the specification (*see page 11*), in the case where the melt viscosity is less than 30 Pa·s at a temperature of 140°C (*see, Examples 2 and 3*), shear resistance characteristics become poorer in comparison with those within the instantly claimed range (*see, Example 1*). Therefore, the instantly claimed hot-melt adhesive having a melt viscosity of not less than 30 Pa·s at 140°C provides excellent results when compared with hot melt adhesives having a melt viscosity of less than 30 Pa·s at 140°C (as evidenced by comparison of “Shear Resistance Characteristics” for Example 1, Example 2 and Example 3 in Table 1 of the Specification).

For the Examiner’s convenience, a copy of Table 1, from page 11 of the specification is reproduced immediately below (with the column titled “Shear Resistance Characteristics (min)” being bolded, and beginning of the rows titled “Example 1”, “Example 2” and “Example 3” being bolded).

TABLE 1

	Melt Viscosity (140°C) of Hot- melt Adhesive (Pa·s)	Outer Nonwoven Fabric Making Side Flap	Shear Resistance Characteristics (min)	High-speed 180° Peel Strength Characteristics (N/30mm)
Example 1	56	SMS; 15 g/m ²	65.4	material failure
Example 2	12	SMS; 15 g/m ²	38.5	material failure
Example 3	12	SMS; 8 g/m ²	31.7	material failure
Comparative Example 1	7	SMS; 15 g/m ²	5	material failure
Comparative Example 2	8	SMS; 15 g/m ²	60	4.9

More particularly, in Table 1 of the Specification it is shown that there when the melt viscosity at 140°C was 56 Pa·s (Example 1), the Shear Resistance Characteristics (min) was 65.4, whereas, in Each of Examples 2-3 (where the melt viscosity at 140°C was 12 Pa·s), the

Shear Resistance Characteristics (min) were only 38.5 and 31.7, respectively. This is also clearly shown in the below “*abbreviated*” version of Table 1 of the instant specification.

TABLE 1 (*abbreviated*)

	Melt Viscosity (140°C) of Hot- melt Adhesive (Pa-s)	Shear Resistance Characteristics (min)
Example 1	56	65.4
Example 2	12	38.5
Example 3	12	31.7

Notably, none of the cited art references of record provides any teaching or disclosure of the above fact and/or achievement, or anything related thereto, which might render the same obvious. Moreover, none of the cited art references of record provide any motivation or teaching to those of ordinary skill in the art that would allow them to arrive at the instant invention as claimed, including the instantly claimed limitation of a “hot-melt adhesive, which has a melt viscosity of 30 to 100 Pa-s at 140°C”. Absent such teachings and motivation in the cited art, the outstanding obviousness rejection of pending claims 1-6 is not sustainable.

Apart from the above distinctions over the cited art, it is further noted that the use of a “hot-melt adhesive, which has a melt viscosity of 30 to 100 Pa-s at 140°C” in the instant invention offers another advantage that is not taught or envisioned by any of the cited art of record. This additional advantage, is that a hot melt adhesive having the claimed viscosity improves adhesion strength with a small area of application when adhering a tab tape made of propylene to nonwoven fabric. Such a discovery and such a discovered property is in no way taught or rendered obvious by the cited art of record, and further evidences the non-obviousness of the instant invention being claimed.

CONCLUSION

Based on the remarks presented herein, the Examiner is respectfully requested to issue a notice of allowance, clearly indicating that pending claims 1-6 are allowed and patentable under the provisions of

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John W. Bailey (Reg. No. 32,881) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

John W. Bailey
Registration No.: 32,881
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant